

ABSTRACT

An arrangement for obtaining measurable voltage signals in a utility meter wherein the measurable voltage signals are representative of a power line voltage signal. Includes a first connection to a phase of a power line, a second connection to a reference of a power line, a voltage divider circuit, and a series impedance element. The voltage divider circuit is disposed on a circuit board and is coupled between a first node and the second connection. The voltage divider circuit has an output configured to provide measurable voltage signals to a circuit operable to generate voltage measurement information. The voltage divider circuit has a first impedance value. The series impedance element is disposed apart from the circuit board and is configured for current limiting. The series impedance element is coupled between the first connection and the first node and has a second impedance value.